

What is claimed is:

1. An isolated human antibody or fragment thereof which binds selectively to KDR.
2. The antibody of Claim 1, wherein the fragment is selected from the group consisting of a single chain antibody, an Fab, a single chain Fv, a diabody, and a triabody.
3. The antibody of Claim 1 or 2, wherein the antibody or fragment thereof inhibits binding of VEGF to KDR.
4. The antibody of any of Claims 1, 2, and 3, wherein the antibody comprises complementarity determining regions represented by SEQ ID NO:1 at CDRL1; SEQ ID NO:2 at CDRL2; SEQ ID NO:3 at CDRL3; SEQ ID NO:13 at CDRH1; SEQ ID NO:14 at CDRH2; and SEQ ID NO:15 at CDRH3.
5. The antibody of any of Claims 1, 2, and 3, wherein the antibody comprises a light chain variable domain represented by SEQ ID NO:26 and a heavy chain variable domain represented by SEQ ID NO:24.
6. The antibody of any of Claims 1, 2, and 3, wherein the antibody comprises complementarity determining regions represented by SEQ ID NO:81 at CDRL1; SEQ ID NO:82 at CDRL2; SEQ ID NO:83 at CDRL3; SEQ ID NO:13 at CDRH1; SEQ ID NO:14 at CDRH2; and SEQ ID NO:15 at CDRH3.
7. The antibody of any of Claims 1, 2, and 3, wherein the antibody comprises a light chain variable domain represented by SEQ ID NO:53 and a heavy chain variable domain represented by SEQ ID NO:24.
8. The antibody of any of Claims 1, 2, and 3, wherein the antibody comprises a heavy chain variable domain selected from the group consisting of SEQ ID NO:20, SEQ ID NO:24, and SEQ ID NO:31.
9. The antibody of any of Claims 1, 2, and 3, wherein the antibody comprises a light chain variable domain selected from the group consisting of SEQ ID NO:22, SEQ ID NO:26, SEQ ID NO:29, SEQ ID NO:33, SEQ ID NO:35, SEQ ID NO:37,

SEQ ID NO:39, SEQ ID NO:41, SEQ ID NO:43, SEQ ID NO:45, SEQ ID NO:47, SEQ ID NO:49, SEQ ID NO:51, and SEQ ID NO:53.

10. An isolated polynucleotide which comprises a nucleotide sequence that encodes an amino acid sequence selected from the group consisting of SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ ID NO:26, SEQ ID NO:29, SEQ ID NO:31, SEQ ID NO:33, SEQ ID NO:35, SEQ ID NO:37, SEQ ID NO:39, SEQ ID NO:41, SEQ ID NO:43, SEQ ID NO:45, SEQ ID NO:47, SEQ ID NO:49, SEQ ID NO:51, and SEQ ID NO:53.

11. The polynucleotide of Claim 10 wherein the nucleotide sequence is SEQ ID NO:23.

12. The polynucleotide of Claim 10 wherein the nucleotide sequence is SEQ ID NO:25.

13. The polynucleotide of Claim 10 wherein the nucleotide sequence is SEQ ID NO:52.

14. An expression vector comprising the polynucleotide of any of Claims 10 to 13.

15. A recombinant host cell comprising the expression vector of Claim 14.

16. The recombinant host cell of Claim 15 which produces a polypeptide comprising SEQ ID NO:24 and a polypeptide comprising SEQ ID NO:26.

17. The recombinant host cell of Claim 15 which produces a polypeptide comprising SEQ ID NO:24 and a polypeptide comprising SEQ ID NO:53.

18. A method of neutralizing activation of KDR comprising administering an effective amount of an antibody of any of Claims 1 to 9.

19. A method of inhibiting angiogenesis comprising administering an effective amount of an antibody of any of Claims 1 to 9.

20. A method of reducing tumor growth comprising administering an effective amount of an antibody of any of Claims 1 to 9.

21. The method of Claim 19 or 20, wherein the antibody neutralizes KDR.
22. The method of Claim 20, wherein the tumor overexpresses KDR.
23. The method of Claim 20, wherein the tumor is a tumor of the colon.
24. The method of Claim 20, wherein the tumor is a breast tumor.
25. The method of Claim 20, wherein the tumor is a non-solid tumor.
26. The method of Claim 20, which further comprises administering of a therapeutically effective amount of an epidermal growth factor receptor (EGFR) antagonist.
27. The method of Claim 20, which further comprises administration of a therapeutically effective amount of *fms*-like tyrosine kinase receptor (flt-1) VEGFR-1.
28. The method of Claim 20, which further comprises administration of chemotherapeutic agent.
29. The method of Claim 20, which further comprises administration of radiation.